

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Franz Lindlbauer

Serial No.: 10/598,848

Filed: September 13, 2006

For: MULTI-WALLED, SACK-TYPE PACKAGING

Attorney Docket No.: WAS 0808 PUSA

Group Art Unit: 3728

Examiner: Andrew D. Perreault

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief from the final rejection of claims 10-20 in the Office Action mailed on November 26, 2008 for the above-identified patent application.

I. REAL PARTY IN INTEREST

The real party in interest is Wacker Chemie AG ("Assignee"), a corporation organized and existing under the laws of Germany, and having a place of business at Hanns-Seidel-Platz 4, Munich, Germany 81737, as set forth in the assignment recorded in the U.S. Patent and Trademark Office on October 1, 2008, at Reel 021603/Frame 0608.

II. RELATED APPEALS AND INTERFERENCES

There are no appeals, interferences or judicial proceedings known to the Appellant, the Appellant's legal representative, or the Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 10-20 are pending in this application. Claims 10-20 have been rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

An amendment after final rejection was filed on February 26, 2009. It has been acted upon and entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent claims involved in the appeal now follows:

The invention relates to a multi wall sack-like packaging medium for particulated materials, especially powdery materials. *Specification, 1:2-5.*

The invention is a multilayer, sack-like packaging medium 1, *Specification, 2:1-2; Fig. 1.* The packaging medium has a broad rear side 2 and a front side 3. *Id., 2:3.* The sides 2, 3 are joined by narrow side areas 4, 5. *Id., 2:4.* The packaging medium 1 is closed at the upper

end 6 and lower end 7. *Id.*, 2:5. An opening 8 is provided for filling at the upper end 6. *Id.*, 2:5-6.

The packaging medium 1 has an inner wall 9 that is made of an air-permeable material. *Id.*, 2:7-8. It is surrounded by an outer wall 10 of an air-impermeable material. *Id.*, 2:8-9; *Figs. 1-2*.

Independent claim 1 has sub-elements a-f, which are respectively depicted in *Figs. 1-2* and are summarized below.

- a) On at least one of the sides 2, 3, layers of the outer wall 10 overlap to form a subregion of up to 50% of the total area of the side to form an overlap region 11.
- b) In that region, only the inner layer 10a of the outer wall 10 is perforated.
- c) The overlap region 11 has edges 12, 13 that terminate the inner and outer layers 10a, 10b of the outer wall 10. The edge 12 is joined by seam 14 to the underlying inner layer 10a. The edge 13 is joined by seam 15 to the overlaying layer 10b.
- d) At one or both edges 12, 13 of the overlap region 11, the seam on the respective edge 12 (for example) is interrupted over a continuous region 16. The interruption extends 10 to 50% of the total length of the seam 14. This allows gas exiting the sack through perforations to pass.
- e) From 10 to 50% of the area of the overlap region is provided with perforations in the inner layer 10a.
- f) Preferably, a distance of 0.5 to 10 cm from the edges 12, 13 of the overlap region at which the seam is interrupted 16 is maintained free of perforations. Upon filling the sack, the two layers 10a, 10b lying one above the other in the overlap region 16 bear against each other.

Thus, during a filling step, air can emerge quickly, in spite of the outer wall 10 being made of plastic. *Id.*, 4:30-32. During storage of the filled sacks, the opening 16 in the

overlap region 11 is closed by the inherent weight of the filled packaging medium. *Id.*, 4:32-35. As a consequence, a self-sealing function is enabled. Also, no atmospheric moisture or spray can enter the interior via the perforations 18. *Id.*, 4:35-38.

Relatedly, as defined in claim 19, the invention also comprehends transporting or storing particulate material in a storage medium as defined in independent claim 10. *Id.*, 5:1-3.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 10-20 are unpatentable under 35 U.S.C. § 112, ¶ 1, "as failing to comply with the written description requirement" because they allegedly contain "subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention". The Examiner observed that "[a]s originally filed, the specification does not contain the self sealing limitation added to claim 10; the limitation is considered impermissible new matter. Claims 11-20 depend upon claim 10, and are therefore rejected.". *Office Action, November 26, 2008*, ¶ 2.

2. Whether claims 10-20 are unpatentable under 35 U.S.C. § 103(a) over *Combrink* (US 5,493,844) in view of *Barnes et al.* (US 4,672,684) and *Scoville, Jr.* (US 4,596,696).

VII. ARGUMENT

1. Claims 10-20 Are Patentable Under 35 U.S.C. § 112, ¶ 1.

The following limitation was added to element (f), claim 10 by the Amendment dated September 18, 2008: ". . . upon filling of the sack, the two layers lying one above the other in the overlap region bear against each other forming a self-sealing seal". The Examiner's view is that this limitation "is considered impermissible new matter". *Office Action, November 26, 2008, ¶ 2.*

Support for this limitation appears in the Specification. For example:

"During storage of the filled sacks, the opening in the overlap region is closed by the inherent weight of the filled packaging medium, with the effect that no atmospheric moisture or spray can enter the interior via the perforation." *Specification, 4:32-37.*

Briefly stated, Applicant's argument is that the Specification's use of the phrase "closed by the inherent weight of the filled packaging medium" provides ample support for the "self-sealing" limitation.

Bulging of the walls is caused by pressure executed outwardly by the particulate materials. Thus, the inherent weight of the filled sack seals it - - i.e., according to the ordinary meaning of plain words, the sack is "self-sealing". Although the literal words "self-sealing" may not be explicitly contained in the Specification, they need not be, so long as the concept expressed by the words is so contained. *Fujikawa v. Wattanasin*, 39 USPQ2d 1895, 1904 (Fed. Cir. 1996); *Pardue Pharma L.P. v. Faulding, Inc.*, 56 USPQ2d 1481, 1483 (Fed. Cir. 1996). To satisfy the written description requirement, the disclosure, as originally filed, does not have to provide *in haec verba* support for the claimed subject matter at issue.

For these reasons, claim 10 is patentable under 35 U.S.C. § 112, ¶ 1.

In response to the 35 U.S.C. § 112 ¶ 1 rejection, claims 10-20 are argued herein as a group because claims 11-20 depend, directly or indirectly, upon claim 1 and include its limitations.

2. Claims 10-20 Are Patentable Over *Combrink* (US 5,493,844) ("*Combrink*") In View Of *Barnes et al.* (US 4,672,864) ("*Barnes*") And *Scoville, Jr.* (US 4,596,696) ("*Scoville*").

Claims 10 - 20 stand rejected over *Combrink* U.S. 5,493,844 ("*Combrink*") in view of *Barnes et al.* U.S. 4,672,684 ("*Barnes*") and *Scoville* U.S. 4,596,696 ("*Scoville*"). Applicants respectfully traverse this rejection because the Examiner has failed to make a *prima facie* case for the following reasons.

(i) Claim 10

A. The Proposed Combination Is Improper, As *Scoville* Is Non-Analogous Art.

A non-analogous reference cannot be used to reject the claims of an application, whether alone or in combination with other references. *In re Wood*, 202 USPQ 171, 174; 599 F.2d 1032, 1036 (CCPA 1979).

The standards for determining whether a reference is analogous are set forth in *In re Clay*, 23 USPQ 2d 1058 (Fed. Cir. 1992):

Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the

particular problem with which the inventor is involved. *In re Deminski*, 796 F.2d 436, 442; 230 USPQ 313, 315 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

The PTO argues that *Sydansk* and *Clay*'s inventions are part of a common endeavor -- "maximizing withdrawal of petroleum stored in petroleum reservoirs." However, *Sydansk* cannot be considered to be within *Clay*'s field of endeavor merely because both relate to the petroleum industry.

The field of endeavor of the claimed invention is a multi-wall, sack-like packaging medium for powdery materials. *See*, the "Field of the Invention" subsection of the "Background of the Invention" section of the present application. *Combrink* is directed to the same field of endeavor and so is *Barnes*. *Scoville* is not, however. *Scoville* is directed to a disposable sterilizer test pack of rigid cardboard perforated with slots. It contains a "tell-tale" thermal indicator to test effectiveness of vacuum autoclave sterilization. *Scoville's* package is rigid, not sack-like, and is not designed for filling with powdery material. The field of endeavor of *Scoville* is completely different from the field of endeavor of Applicant. The first prong of the *Clay* test is not met.

The problems solved by Applicant are (1) providing a sack with sufficient air flow through perforations through an outer wall of impermeable material during filling with powdery material; (2) be self-sealing; and (3) preventing the ingress of moisture. The problem addressed by *Scoville* is to provide a package which establishes a constant rate of steam ingress to the inside of the test pack as an improvement over towels and packings previously used, to provide a more reliable and repeatable test method. The package of *Scoville* is purposefully designed to admit moisture. Thus, the problems addressed by Applicant and by *Scoville* are not related. The second prong of the *Clay* test is not met.

The mere fact that both the subject invention and *Scoville* are directed to "packages" does not make *Scoville* analogous. Note the second paragraph of *Clay* cited above. The field of packaging is extremely broad. One seeking to improve upon the packaging of

powdery materials would not look to methods of packaging peanut butter or salted cod, for example. In all fairness, one skilled in the art of packaging powdery materials would not look to a cardboard box test pack for autoclave sterilization. *Scoville* is a non-analogous reference.

**B. The Combination, Even Though Improper Does
Not Teach Or Suggest The Claimed Invention.**

The proposed combination is not only improper because it includes non analogous art, it is also improper because the references cannot be physically combined.

Scoville discloses a box of paperboard stock. Two of the salient features of *Scoville* are (1) the "cardboard" is necessary to preserve the definition of the shape of the box (4:15-22); and (2) the box has a polymer film on the inside the box, laminated to the paperboard.

It is well established that one cannot pick and choose only so much from a reference to support a rejection, while ignoring the salient features of a reference. The reference must be viewed as a whole. See, *e.g. In re Wesslau*, 353 F.2d 238; 147 USPQ 391 (CCPA 1965):

The ever present question in cases within the ambit of 35 U.S.C. 103 is whether the subject matter as a whole would have been obvious to one of ordinary skill in the art following the teachings of the prior art at the time the invention was made. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. (emphasis added). *Wesslau*, at 393.

This has been the law for almost half a century. Thus, any combination of *Scoville* with another reference or with other references must contain these features and the other salient features of *Scoville*: 1) rigid paperboard shape-retaining exterior; 2) polymer film

laminated to the interior surfaces of the paperboard; 3) holes and slots through the laminated exterior such that both layers are permeable to air and steam (4:32 - 35; claim 1; 7:47 - 51).

However, if these salient features are retained in the combination of references, as *Wesslau* requires, the combination would be far from that claimed and be inviable. The product would be a rigid box having a moisture and air permeable outer layer and an interior polymer film, with perforations through both. The claimed invention requires an outer polymer film, which is impervious to air and moisture, which is free of perforations.

The combination of *Scoville* with *Combrink* and *Barnes* cannot possibly teach or suggest the claimed invention.

C. If Made, The Proposed Combination Would Differ In Non Obvious Ways From The Claimed Invention.

Even if these deficiencies were ignored, there are further non-obvious differences between the claimed invention and the combined references.

For example, a significant difference between *Combrink* and the claimed invention is that *Combrink* does not teach the self-sealing characteristic of the present invention. Fig. 1 of *Combrink* clearly shows that 100% of the overlapping region is perforated (5:57 - 60: "The lower material layer 14 is provided between the longitudinal seams 16, 19 in the overlap zone 13 with a perforation 20..."). That means the whole overlapping zone is perforated. The overlapping region is closed over the whole length on the left side with the longitudinal seam 16. But on the right side of the overlapping region, the longitudinal seam 19 is left continuously open (5:53 - 56). To prevent penetration of moisture during storage, the initially open longitudinal seam 19 contains a strip-shaped hot-melt adhesive, which is activated through heat for sealing the seam 19 (6:9 - 14).

This is not self-sealing. The bag does not seal itself through the weight of its contents.

In its analysis of *Combrink*, the Office mistakenly characterizes the overlapping region of *Combrink* in two ways:

(i) The First Mischaracterization of *Combrink*

On page 3, lines 9 - 10 of the Office Action dated November 26, 2008, the Office refers to Figure 3 and states that "the joint 12 is interrupted over a continuous region which covers 10 to 50% of [its] total length . . .". That is not correct - it is interrupted over the whole length.

The "interruption" pointed to in the Figure and transposed into the Office Action is not an interruption. First, it is the top fold of the sack and not the front or rear side, as recited in the claims. Second, it is clear that the perforations extend into this area as well, as shown in Figure 2. No perforations are shown in Figure 3. Moreover, in Figure 3, the outer layer of that embodiment is paper (27), not an impermeable film. The film in Figure 3 is on the inside, directly opposite to what is claimed.

The special feature of *Combrink* Fig. 3 (sack 22') thus contrasts with Fig. 2 (sack 22) and Fig. 1, where the packaging container is made of a single thermoplastic film (tube) (5:33-34; 6:35 - 37). In Fig. 3, the thermoplastic material is provided with an outer paper layer (7:1-8)¹. It is clear with respect to Fig. 3 that, as well as for sack 22 of Fig. 1 and 2, the longitudinal seam 19 is initially open over the whole length of the sack and is closed by heat-sealing after filling and ventilation (7:12 - 19).

¹In Applicant's invention, the outer layer is a polymer layer, not a paper layer - - just the opposite of this embodiment.

(ii) **The Second Mischaracterization of *Combrink***

The second misinterpretation of *Combrink* by the Office concerns the area of perforation.

On page 3, lines 14 - 15 of the Office Action dated November 26, 2008, the Office states that in *Combrink* "10 to 50% of the area of the overlap region 13 is provided with perforations 20 . . .", citing *Combrink* 7:1-9 (where nothing relates to the area of perforation is disclosed) and 5:57-65 (where quite the opposite is disclosed - 100% of the area is perforated, as discussed above). Figs. 2 and 3 also make clear that 100% of the area is perforated.

Such mischaracterizations teach away from the invention as claimed ("10 to 50% of the area of the overlap region is provided with perforations"). There is nothing in *Combrink* which would motivate one skilled in the art to open one side of the overlapping region only partly and to perforate the overlapping region only partly, for preventing penetration of moisture even without a heat-sealing step. The Office is of the opinion that *Scoville* would teach such a modification. However, he does not.

As noted earlier, *Scoville* teaches quite a different subject - a test pack for testing the working of vacuum sterilizers (1:1-2). The test pack is composed of a box filled with a stack of sheets comprising a thermal indicator sheet T which indicates whether contact with steam has taken place (3:60-65; 8:40-45). A pre-condition for the contact of steam with the test sheet is the permeability of the box for steam, which is enabled by perforation of the box with holes or slots (4:32-35). That is quite the opposite of and thus teaches away from the present invention, which is based on preventing penetration of moisture.

On page 5, lines 11 - 13 of the Office Action dated November 26, 2008, the Office cites 7:42-60 of *Scoville* for making obvious the characteristics of the present invention in combination with *Combrink*. Yet this paragraph states: ". . . good sized holes or slots must be provided in the box. . .!" This clearly indicates that the citation of *Scoville* in regard to the present invention is flawed. *Combrink* teaches preventing penetration of moisture by closing the perforation area with heat-sealing. *Scoville* is contradictory to *Combrink* because in his test box the penetration of steam has to be optimized for testing the function of a steam sterilizer. Therefore, it makes no sense to combine these two references, and the combination would never result in the present invention.

The Office further states on page 5, lines 14-16 of the November 26, 2008 Office Action that *Barnes* "discloses a similar sack . . . with two layers in an overlapping region . . ." and refers to the figures of this reference. Fig. 2 in connection with 5:55-62, clearly indicates that the back wall 11 of the sack "has a multiplicity of perforations". But the overlapping region formed by panels 12 and 13 is on the nonperforated front-side. As seen in Figure 1 in connection with 6:4-11, the non-perforated overlapping region forms a sleeve for filling the sack. The self-sealing mentioned in 7:45-50, relates to the sealing of the filling valve, but not to the sealing of the perforated area. The perforated area in the sack of *Barnes* (back wall 11) always remains uncovered and unsealed, and thus certainly cannot prevent penetration of moisture. Moisture can freely flow into the *Barnes* sack.

To obtain a self-sealing packaging sack, the combination of features d), e), and f) of the present invention are essential. *Combrink* has no intention to obtain a self-sealing sack. Therefore he closes the perforation area by heat-sealing after completion of filling. This does not make obvious the combination of features of the present invention.

Both *Scoville* and *Barnes* disclose packaging with open perforated walls. The combination of *Combrink* with *Scoville* and *Barnes* may lead an unskilled worker to remove the overlapping layer of the *Combrink* sack. But that is not the claimed invention!

For the reasons stated above, the Office Action dated November 26, 2008 lacks any "articulated meaning with some rational underpinning to support the legal conclusion of obviousness". MPEP 2143.01 (IV).

For these reasons, claim 10 is patentable under 35 U.S.C. § 103 in light of the proposed combination of references.

(ii) Claims 11-20

Claims 11-20 depend, directly or indirectly, upon claim 1 and include its limitations.

Claim 11 discloses the limitations of claim 10 which are distinguishable from *Combrink* for the reasons stated above. It also calls for an additional element, "the outer wall overlaps only on the rear side". In combination with claim 10, the added limitation of claim 11 is neither taught or suggested by *Combrink* for the reasons stated above.

As to claims 12-13, further limitations are added to claim 10: "the outer wall overlaps over its entire length" (claim 12); and "the outer wall overlaps only on the rear side" (claim 11); and "over its entire length" (claim 13). Again, *Combrink* fails to teach or suggest the combined features for the reasons stated above.

In addition to the elements of claim 10, claim 14 defines that: "the interruption is in the upper half of the packaging medium". *Combrink* fails to disclose that combination of features for the reasons stated above.

Claim 17 defines that: "the inner wall comprises paper, woven material of synthetic fibers or natural fibers, or nonwoven materials made of synthetic fibres or natural fibres". It includes the limitations of claim 10 which are patentably distinguishable from the teachings and suggestions of *Combrink* for the reasons stated earlier.

Claims 19-20 disclose the step of "transporting or storing said particulate materials in a storage medium of claim 10" (claim 19), and further define the particulate materials (claim 20). For the reasons stated earlier, *Combrink* neither teaches nor suggests the invention as defined in independent claim 10. So *Combrink* cannot render obvious the invention defined in dependent claims 19-20.

CONCLUSION

For the reasons discussed above, the rejection of claims 10-20 under 35 U.S.C. § 112, ¶ 1 and § 103 should be reversed.

The fee of \$540.00 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2) is enclosed. Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978.

Respectfully submitted,

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Enclosures - Appendices VIII - X

VIII. CLAIMS APPENDIX

10. A multilayer, self-sealing packaging sack, comprising a broad front side and a broad rear side joined by first and second narrower side areas, and closed at an upper end and a lower end, an opening for filling being free at the upper end, the packaging medium having an inner wall made of air-permeable material surrounded by an outer wall of air-impermeable material, wherein

a) on at least one of the front side and the rear side, the outer wall overlaps a subregion of up to 50% of the total area of the respective side to form an overlap region having an inner surface and an outer surface of the outer wall,

b) in the overlap region, the inner surface of the outer wall is perforated,

c) at edges of the overlap region, the edges of the inner and outer surfaces of the outer wall lying one above the other are joined to each other by means of seams forming joints,

d) at one or both edges of the overlap region, the joint on the respective edge is interrupted over a continuous region which covers 10 to 50% of the total length of the joint to form an interruption through which gas exiting the sack through perforations can pass,

e) 10 to 50% of the area of the overlap region is provided with perforations, and

f) a distance of 0.5 to 10 cm from the edges of the overlap region at which the joint is interrupted is maintained free of perforations, such that upon filling of the sack, the

two layers lying one above the other in the overlap region bear against each other forming a self-sealing seal.

11. The packaging medium of Claim 10, wherein the outer wall overlaps only on the rear side.

12. Packaging medium of Claim 10, wherein the outer wall overlaps over its entire length.

13. Packaging medium of Claim 11, wherein the outer wall overlaps over its entire length.

14. The packaging medium of Claim 10, wherein the interruption is in the upper half of the packaging medium.

15. The packaging medium of Claim 11, wherein the interruption is in the upper half of the packaging medium.

16. The packaging medium of Claim 12, wherein the interruption is in the upper half of the packaging medium.

17. The packaging medium of Claim 10, wherein the inner wall comprises paper, woven material of synthetic fibers or natural fibers, or nonwoven materials made of synthetic fibres or natural fibres.

18. The packaging medium of Claim 10, wherein the air-impermeable outer walls comprise a plastic film.

19. In the transport and storage of particulate materials, the improvement comprising transporting or storing said particulate materials in a storage medium of claim 10.

20. The transport and storage of claim 19, wherein said particulate material includes at least one particulate material selected from the group consisting of polymer powders, redispersible polymer powders, highly disperse silica, cement, gypsum, as dry mortar, flour, animal feed, and water-soluble cement plasticizers and thickening agents.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.